(Slip Opinion)

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In re:	)	
Hawaii Electric Light Company, Inc.	)	PSD Appeal Nos. 97-15 through 97-23
PSD/CSP Permit No. 0007-01-C	)	

[Decided November 25, 1998]

ORDER DENYING REVIEW IN PART AND REMANDING IN PART

Before Environmental Appeals Judges Ronald L. McCallum, Edward E. Reich and Kathie A. Stein.

HAWAII ELECTRIC LIGHT COMPANY

PSD Appeal Nos. 97-15 through 97-23

ORDER DENYING REVIEW IN PART AND REMANDING IN PART

Decided November 25, 1998

Syllabus

The Board has consolidated for decision nine petitions for review of a Clean Air Act ("CAA") prevention of significant deterioration (PSD) permit (the "Permit") issued to Hawaii Electric Light Company, Inc. ("HELCO") by the State of Hawaii Department of Health ("DOH"). The Permit would authorize HELCO to expand its Keahole Generating Station in Kona on the Big Island of Hawaii (the "Station"). The Station currently consists of six 2.5-megawatt diesel engine generators and one 18-megawatt combustion turbine. The proposed expansion consists of constructing and operating two 20-megawatt combustion turbines with heat recovery steam generators, one 16-megawatt steam turbine, and a 235-horsepower emergency diesel fire pump (collectively, the "Project").

The CAA and its implementing regulations require that new major stationary sources, and "major modifications" of such sources, be carefully reviewed prior to construction to ensure that pollution emissions from such facilities will not cause or contribute to an exceedance of the national ambient air quality standards ("NAAQS") or the applicable PSD ambient air quality "increments." The NAAQS are "maximum concentration ceilings" for particular pollutants, and have been established for sulfur oxides (measured in the air as sulfur dioxide, or "SO_2"), particulate matter, nitrogen dioxide, carbon monoxide ("CO"), ozone ("O_3") and lead. The CAA and the regulations require the performance of an ambient air quality and source impact analysis to determine whether the NAAQS or PSD increments will be exceeded as a result of a proposed "major modification" of a facility. The CAA and PSD regulations also require "major modifications" to employ best available control technology, or "BACT," to minimize emissions of regulated pollutants.

In the present case, DOH determined that no.2 fuel oil would be BACT for controlling SO_2 emissions, and that HELCO was not required to use BACT to control emissions of nitrogen oxides ("NO_X"), which would contribute to ambient air concentrations of nitrogen dioxide, on the grounds that its Project was not a "major modification" with respect to NO_X. This determination was based on a "netting" of the

Project's NO_X emission increases with certain "creditable contemporaneous" NO_X emission decreases resulting from HELCO's agreement to shut down or reduce operations of certain diesel generators at the Station. This netting of increases and decreases resulted in a net increase in NO_X emissions below the applicable regulatory significance level that would result in the Project being considered a major modification. Several of the petitions request that the Board review DOH's NO_X netting analysis. Several petitions also seek Board review of DOH's determination that HELCO would be authorized to use no.2 fuel oil, rather than naphtha fuel, as BACT for controlling SO_2 emissions.

Several petitions also seek Board review of various aspects of DOH's ambient air quality and source impact analysis by which DOH determined that the emissions from the Project will not cause or contribute to violations of the NAAQS or the applicable PSD increments. These petitions argue that DOH used background ambient air data that were either out of date or measured at an unrepresentative location. Several petitions also argue that the meteorological data used by DOH and the data regarding other pollution sources were not representative. Finally, one petition argues that DOH was required, but failed, to consult with the local land use planning agency.

HELD: (1) Review of DOH's NO_X netting analysis is denied. Petitioners have not shown any clear error in DOH's determination that the shutdown and use restrictions placed on certain diesel generators are "creditable contemporaneous" reductions and that such restrictions are federally enforceable. The Board accordingly denies review of DOH's determination that the Project is not a "major modification" with respect to NO_X and denies review of the related conditions of the Permit regarding BACT to control NO_X.

(2) Review of DOH's determination that no.2 fuel oil is BACT for control of SO_2 emissions is denied. The petitioner raising this issue has not shown any clear error in DOH's determination that naphtha fuel is not BACT due to questions regarding its long-term availability.

(3) Review of DOH's ambient air quality and source impact analysis is denied in part and granted in part with a remand to DOH for further proceedings. (a) DOH did not adequately respond to Petitioners' comments made during the public comment period that the data regarding ambient air concentrations of SO_2 and particulate matter are out of date (the petitioners' data-currentness argument was based on the fact that the data were measured approximately seven years prior to submission of HELCO's application and on an alleged change in volcanic eruption, a source of SO_2 and particulate matter pollution, after the date when the data were measured). DOH also did not adequately respond to Petitioners' comments that the data for ambient air concentrations of CO and O_3 were measured at an unrepresentative location. Therefore, the Permit is remanded for DOH to up-date its analysis of ambient air concentrations of SO_2 and particulate matter and to either supplement its responses to comments or to use representative data for CO and O_3. (b) Petitioners have failed to show clear error in

DOH's determinations regarding the meteorological data used in the ambient air and source impact analysis, and review of this issue is denied. (c) Petitioners have not shown that DOH failed to include emissions increases from other sources. (d) Petitioners have failed to show that DOH used an improper modeling program.

(4) The Petitioner seeking review on the basis of DOH's alleged failure to consult with the local land use authority has failed to show clear error in DOH's response to comments that land use issues related to "ceded lands" and water rights are outside of the scope and intent of DOH's air permitting requirements and authority.

Before Environmental Appeals Judges Ronald L. McCallum, Edward E. Reich and Kathie A. Stein.

Opinion of the Board by Judge Stein:

Before the Board are nine petitions seeking review of certain conditions of a prevention of significant deterioration ("PSD") permit, Permit No. 0007-01-C (the "Permit"), granted by the State of Hawaii Department of Health ("DOH").[1] The Permit was issued to Hawaii Electric Light Company, Inc. ("HELCO"). We have consolidated for decision the petitions for review (collectively, the "Petitions") filed by Peggy J. Ratliff ("Ms. Ratliff"), the Keahole Defense Coalition ("KDC"), Brad Houser ("Mr. Houser"), Hawaii Physicians & Surgeons Assoc., Inc. ("HP & S"), Marie Aguilar ("Ms. Aguilar"), Kawaihae Cogeneration Partners ("KCP"), Jerry Rothstein ("Mr. Rothstein"), Philip Mosher

[1]DOH administers the PSD program in Hawaii pursuant to a delegation of authority from U.S. EPA Region IX (the "Region"). Because DOH acts as EPA's delegate in implementing the federal PSD program within the State of Hawaii, the Permit is considered an EPA-issued permit for purposes of federal law, and is subject to review by the Board pursuant to 40 C.F.R. § 124.19. *In re Kawaihae Cogeneration Project*, PSD Appeal Nos. 96-9 to 96-11, 96-14 & 96-16, slip op. at 3 n.1 (EAB, Apr. 28, 1997), 7 E.A.D. __; *In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 765 n.1 (EAB 1997); *In re West Suburban Recycling & Energy Ctr., L.P.*, 6 E.A.D. 692, 695 n.4 (EAB 1996). Pursuant to the Region's delegation agreement with Hawaii, the Region retains the authority to concur on DOH's determinations of what constitutes "best available control technology" for the control of regulated pollutants in PSD permits issued by DOH, and to concur on DOH's evaluation of air impact modeling analyses. Amended Delegation Agreement, 54 Fed. Reg. 23,978 (June 5, 1989).

("Mr. Mosher"), and Richard Tanzella ("Mr. Tanzella") (collectively, the "Petitioners").

For the reasons explained below, we deny in part and grant in part the Petitions, and remand the Permit to DOH for further proceedings.

I. *BACKGROUND*

The Permit was issued by DOH on October 28, 1997, and would authorize HELCO to expand its Keahole Generating Station in Kona on the Big Island of Hawaii (the "Station"). The Station currently consists of six 2.5-megawatt ("MW") diesel engine generators (called Units D-18, D-19, D-20, D-21, D-22, and D-23), and one 18-MW combustion turbine ("Unit CT-2"). The proposed expansion consists of constructing and operating two 20-MW combustion turbines ("Units CT-4 and CT-5") with heat recovery steam generators, one 16-MW steam turbine ("Unit ST-7"), and a 235-horsepower emergency diesel fire pump (collectively, the "Project").

HELCO submitted its initial application for a PSD permit in 1994.[2] HELCO's application was premised on an ambient air quality impact analysis showing that the Project would emit nitrogen oxides ("NO_X") and sulfur dioxide ("SO_2"), among other pollutants, at rates qualifying as "significant" increases under the terms of the regulations implementing the Clean Air Act.[3] As such, HELCO's application presumed that HELCO would be required to install the best available control technology, or "BACT," for controlling NO_X and SO_2 emissions. HELCO proposed using water injection technology to control NO_X emissions and no.2 fuel oil to control SO_2 emissions.

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[2]Pursuant to State law, HELCO submitted a combined PSD and Clean Air Act Title V operating permit application. *See Kawaihae Cogeneration*, slip op. at 5 n.5.

[3]As explained in more detail below, only pollutants for which potential emissions may exceed certain thresholds set forth at 40 C.F.R. § 52.21(b)(23) are subject to PSD review.

Based on data submitted with HELCO's application, DOH prepared an ambient air quality impact report analyzing the background ambient air concentrations, and the impact of the Project on the ambient air concentrations of SO_2, nitrogen dioxide ("NO_2"),[4] particulate matter ("PM"), carbon monoxide ("CO") and ozone ("O_3"), and concluded that the emissions from the Project would not cause or contribute to any violations of the relevant air quality standards. *See* Ambient Air Quality Impact Report (Sept. 28, 1995) (the "AAQ Report") at 25-26. DOH also concluded that water injection would be BACT for controlling NO_X emissions and no.2 fuel oil would be BACT for controlling SO_2 emissions as had been requested by HELCO. *Id.* at 14-15, 17. DOH then prepared a draft permit in August 1994. The public was given notice and an opportunity to comment on both the draft permit and DOH's analysis in September 1994 and again in April 1995.

The comments received by DOH, among other things, objected to (1) the selection of water injection as BACT for controlling NO_X, (2) the selection of no.2 fuel oil as BACT for controlling SO_2, and (3) various aspects of DOH's air quality impacts analysis. Notwithstanding those comments, DOH determined to issue a permit for the Project without material changes on these issues. *See* Response to Comments from the September 12, 1994 and April 10, 1995 Public Hearings on the Draft Permit for Hawai'i Electric Light Company, Inc. (Sept. 28, 1995) (the "1995 Response to Comments"). In November 1995, however, the Region declined to concur in the proposed use of water injection as BACT for control of NO_X emissions. Instead, the Region required that HELCO consider selective catalytic reduction ("SCR") as BACT for control of NO_X.

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[4]The Project impacts ambient air concentrations of nitrogen dioxide through emissions of any nitrogen oxides, including nitric oxide and nitrogen dioxide. The preamble to the PSD regulations for nitrogen oxides states that "[c]ombustion sources emit mostly nitric oxide, with some nitrogen dioxide. Upon entering the atmosphere, the nitric oxide changes rapidly, mostly to nitrogen dioxide." 53 Fed. Reg. 40,656 (Oct. 17, 1988).

Subsequently, in April 1996, HELCO submitted a revised ambient air quality impact analysis in which HELCO used "emissions netting" to reach the conclusion that the increase of NO_X emissions would not be above the significance level for PSD review. By its netting analysis, HELCO proposed that the NO_X emissions increases from the Project be considered along with certain source-wide "creditable contemporaneous" emissions decreases, and that only the "net" change in emissions be used to determine whether the emissions increase is above the significance level.

In its revised analysis, HELCO achieved NO_X emission reductions by agreeing to the permanent shutdown of Units D-18, D-19, and D-20, and a fuel restriction on Unit D-21. By netting these proposed reductions with the increases resulting from the Project, HELCO's analysis concluded that the net increase in emissions of NO_X would be below the PSD significance level for NO_X of 40 tons per year and, therefore, it concluded that the Project is not required to use BACT to control NO_X emissions. HELCO continued to propose that it would use no. 2 fuel oil as BACT to control SO_2 emissions.

DOH reviewed HELCO's proposed netting analysis and, after requiring HELCO to submit more current data regarding the emissions from the generators to be shut down, concluded that the net increases in NO_X emissions resulting from the proposed modifications of the Station would not result in a significant net increase in NO_X emissions. *See* AAQ Report, Supplement B (Dec. 18, 1996) and Supplement B.1 (July 30, 1997) (respectively, "Supplement B" and "Supplement B.1"). DOH prepared a draft permit incorporating requirements relating to the netting analysis, including requirements for the permanent shutdown of Units D-18, D-19, and D-20, and the fuel restriction on Unit D-21 (the "Revised Draft Permit"). The Revised Draft Permit did not require the Project to use BACT to control NO_X emissions. DOH then gave the public notice and another opportunity to comment on the Revised Draft Permit.

During this third public comment period, each of the Petitioners submitted comments on the Revised Draft Permit. DOH then prepared a

summary of the comments and provided responses to the comments. *See* Public Comment Period & Public Hearing of March 3, 1997, Summary of Public Comments and Testimony Received on the Draft Air Permit for the Keahole Generating Station Units CT-4 & 5 (Aug. 4, 1997) (the "1997 Response to Comments"). In October 1997, DOH prepared its final revisions to the Revised Draft Permit and, with the Region's concurrence, issued the Permit.

The Petitioners then filed their Petitions, principally seeking review of DOH's NO_X emissions netting analysis, DOH's analysis of ambient air quality and source impacts, and DOH's determination that no.2 fuel oil would be BACT for controlling SO_2 emissions from the Project.[5] For the reasons stated below, we conclude that the Petitioners have failed to sustain their burden of showing clear error or that review by this Board is otherwise warranted with respect to the NO_X netting analysis and the determination that no.2 fuel oil shall be BACT for controlling SO_2 emissions from the Project. However, we grant review of certain aspects of DOH's analysis of the ambient air quality and source impacts, and we remand to DOH for further proceedings as discussed below in Part II.D.

II. *DISCUSSION*

A. *Statutory, Regulatory and EPA Guidance and Standard of Review*

1. *Standard of Review*

The Board's review of PSD permitting decisions is governed by 40 C.F.R. part 124, which "provides the yardstick against which the Board must measure" petitions for review of PSD and other permit decisions. *Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 769 (EAB 1997)(quoting *In re Envotech, L.P.*, 6 E.A.D. 260, 265 (EAB 1996)).

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[5]KCP also filed a petition with the Administrator seeking to challenge the Title V components of the permit issued to HELCO. The petition was denied. *See* Order Denying Petition for Objection to Permit (Adm'r, Apr. 3, 1998).

Pursuant to those regulations, a decision to issue a PSD permit will ordinarily not be reviewed unless the decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. 40 C.F.R. § 124.19(a); *accord, e.g.*, *In re Kawaihae Cogeneration Project*, PSD Appeal Nos. 96-9 to 96-11, 96-14 & 96-16, slip op. at 10 (EAB, Apr. 28, 1997), 7 E.A.D. __; *In re EcoElectrica, L.P.*, PSD Appeal Nos. 96-8 & 96-13, slip op. at 7 (EAB, Apr. 8, 1997), 7 E.A.D. __, *Commonwealth Chesapeake*, 6 E.A.D. at 769. The preamble to section 124.19 states that the Board's power of review "should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional [State] level * * *." 45 Fed. Reg. 33,412 (May 19, 1980); *accord Kawaihae Cogeneration*, slip op. at 10, 7 E.A.D. __.

The burden of demonstrating that review is warranted rests with the petitioner challenging the permit decision. 40 C.F.R. § 124.19(a); *accord, e.g., Kawaihae Cogeneration*, slip op. at 10, 7 E.A.D. __; *EcoElectrica*, slip op. at 7, 7 E.A.D. __; *Commonwealth Chesapeake*, 6 E.A.D. at 769. We have explained that in order to establish that review of a permit is warranted, section 124.19(a) requires that a petitioner both state the objections to the permit that are being raised for review and explain why the permit decision maker's previous response to those objections (*i.e.*, the decision maker's basis for the decision) is clearly erroneous or otherwise warrants review. *See Kawaihae Cogeneration*, slip op. at 10, 7 E.A.D. __; *see also In re Puerto Rico Elec. Power Auth.*, 6 E.A.D. 253, 255 (EAB 1995); *In re Genesee Power Station, L.P.*, 4 E.A.D. 832, 866 (EAB 1993).

In the present case, the Petition of HP & S does not meet these standards because it is so lacking in specificity as to why the DOH's decision is erroneous that the petitioner has provided the Board with no basis for review.[6] *Puerto Rico Elec. Power*, 6 E.A.D. at 255.

[6]Although it is not possible to discern from the HP & S Petition what specific issues HP & S sought to raise, it would appear that the same general matters were raised (continued...)

Accordingly, the Petition of the HP & S is hereby denied. The remaining Petitions will be discussed below.

2. *Statutory and Regulatory PSD Requirements*

The Clean Air Act ("CAA") established the PSD program to regulate air pollution in certain areas, known as "attainment" areas, where air quality meets or is cleaner than the national ambient air quality standards ("NAAQS"), as well as areas that cannot be classified as "attainment" or "non-attainment" ("unclassifiable" areas). CAA §§ 160 *et seq*., 42 U.S.C. §§ 7470 *et seq*.; *see In re EcoElectrica, L.P*., PSD Appeal Nos. 96-8 & 96-13, slip op. at 5 (EAB, Apr. 8, 1997), 7 E.A.D. __; *In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 766-767 (EAB 1997). The NAAQS are "maximum concentration 'ceilings'" for particular pollutants, "measured in terms of the total concentration of a pollutant in the atmosphere." U.S. EPA Office of Air Quality Planning, New Source Review Workshop Manual ("Draft Manual") [7] at C.3.

The PSD requirements are pollutant-specific, which means that a facility may emit many air pollutants, but only one or a few may be subject to the PSD permit requirements depending upon a number of factors, including the amount of emissions of each pollutant by the facility. Draft Manual at 4. NAAQS have been set for six criteria pollutants:

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[6](...continued)
with sufficient specificity by other petitioners and these matters are addressed below.

[7]The Draft Manual was issued as a guidance document for use in conjunction with new source review workshops and training, and to guide permitting officials with respect to PSD requirements and policy. Although it is not accorded the same weight as a binding Agency regulation, the Draft Manual has been looked to by this Board as a statement of the Agency's thinking on certain PSD issues. *See, e.g., EcoElectrica*, slip op. at 5 n.3, 7 E.A.D. __; *In re Masonite Corp.*, 5 E.A.D. 551, 558 n.8 (EAB 1994).

sulfur oxides,[8] particulate matter,[9] NO_2, CO, O_3, and lead. *See* 40 C.F.R. §§ 50.4-50.12. The Island of Hawaii is located in an area designated attainment or unclassifiable for meeting NAAQS for sulfur oxides, particulate matter, CO, NO_2 and O_3, 40 C.F.R. § 81.312,[10] all of which are at issue in this case.

In order to prevent violations of the NAAQS and, generally, to prevent significant deterioration of air quality, the PSD regulations require that new major stationary sources, and "major modifications" of such sources, be carefully reviewed prior to construction to ensure that emissions from such facilities will not cause or contribute to an exceedance of the NAAQS or applicable PSD ambient air quality "increments." 40 C.F.R. §§ 52.21 *et seq*. A PSD "increment" refers to "the maximum allowable increase in concentration that is allowed to occur above a baseline concentration for a pollutant." Draft Manual at C.3; *see also* 40 C.F.R. § 52.21(c) (establishing increments for regulated pollutants). The performance of an ambient air quality and source impact analysis, pursuant to the regulatory requirements of 40 C.F.R. § 52.21(k), (l) and (m), is the central means for preconstruction determination of whether the NAAQS or PSD increment will be exceeded. The CAA and

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[8]Sulfur oxides are to be measured in the air as SO_2. 40 C.F.R. § 50.4(c).

[9]For purposes of determining attainment of the NAAQS, particulate matter is to be measured in the ambient air as particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers ("PM_{10}"). 40 C.F.R. § 50.6(c).

[10]Ms. Aguilar's petition states, "I am requesting that the EPA revise their standards and reclassify the Island of Hawaii in its own classification." Aguilar Petition at 2; *see also* Mosher Petition at 1. DOH responds that this issue was not raised during the public comment period and, therefore, should not be considered by the Board on appeal. DOH Response at 42-43. Indeed, neither Ms. Aguilar nor Mr. Mosher have shown in their petitions that this issue was raised during the public comment period and, therefore, we deny review. Moreover, even if the issue had been properly raised, reclassification may not be addressed in a PSD permit proceeding such as this case. CAA § 164, 42 U.S.C. § 7474; 40 C.F.R. § 52.21(g). Accordingly, the request for reclassification by Ms. Aguilar and Mr. Mosher is hereby denied.

the PSD regulations also require that new major stationary sources and "major modifications" of such sources employ the "best available control technology," or BACT, to minimize emissions of regulated pollutants. 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52 .21(j)(2). The requirements of preventing violations of the NAAQS and the applicable PSD increments, and the required use of BACT to minimize emissions of air pollutants, are the primary provisions of the PSD regulations. Draft Manual at 5.

The Petitioners in this case raise a variety of issues going to whether DOH properly applied these primary requirements. First, the issues raised regarding DOH's NO_X netting analysis question whether DOH properly determined that HELCO's Project is not a "major modification" of the Station with respect to NO_X emissions. As noted above, the requirements for performing background ambient air monitoring and for using BACT to control emissions of a particular pollutant is only applicable to new stationary sources or "major modifications" that result in net increases in emissions of particular pollutants greater than the PSD significance levels as defined in the regulations at 40 C.F.R. § 52.21(b)(23). DOH's determination in this case that the Project is not a "major modification" with respect to NO_X was based upon the proposed "netting" of the increases in NO_X emissions from the Project with reductions from the proposed permanent shutdown and fuel restrictions for other existing units, which resulted in a net increase less than the applicable PSD significance level of 40 tons per year. The "netting" analysis will be considered in Part II.B of our discussion.

Second, in Part II.C we discuss the request of several Petitioners that we review DOH's determination of BACT for controlling SO_2 emissions. These Petitioners contend that DOH should have determined that naphtha fuel, rather than no.2 fuel oil, is BACT for this Project. Third, several Petitioners request that we review DOH's analysis of ambient air quality and source impacts, which concluded that the Project will not cause or contribute to any exceedance of the NAAQS or PSD increments. These issues will be discussed in Part II.D. Finally, there are several additional, miscellaneous issues that will be discussed in Part II.E.

B. *Netting Nitrogen Oxides (NO_X) Emissions*

KCP, Mr. Rothstein, KDC, and Mr. Tanzella have requested that we review the "netting" analysis by which DOH determined that the Project shall be exempt from the NO_X BACT requirement. KCP Petition at 4-14; Rothstein Petition at 4-5; KDC Petition at 2-7; Tanzella Petition at 5-6. For the following reasons, we deny review of DOH's NO_X netting analysis.

1. *The Regulations and EPA Guidance Regarding Emissions Netting*

As noted, the requirement to use BACT is only applicable to new major stationary sources and "major modifications" of existing major stationary sources determined on a pollutant- specific basis. Because the Station is already a major source with respect to NO_X emissions, at issue here is whether the Project is a "major modification." The PSD regulations define "major modification" as follows:

> *Major Modification* means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

40 C.F.R. § 52.21(b)(2)(i). Further,

> *Net emissions increase* means the amount by which the sum of the following exceeds zero:
>
> (a) Any increase in actual emissions from a particular physical change or change in method of operation at a stationary source; and

> (b) Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

Id. § 52.21(b)(3)(i). "Contemporaneous" is defined to include increases or decreases in emissions that occur between the date five years before construction on the modification commences and the date that the emissions increase from the modification occurs. *See id*. § 52.21(b)(3)(ii). In addition, "[a]n increase or decrease in actual emissions is creditable *only if the Administrator has not relied on it in issuing a permit for the source* * * * which permit is in effect when the increase in actual emissions from the particular change occurs. *Id*. § 52.21 (b)(3)(iii) (emphasis added). For NO_X a net emissions increase is "significant" if it equals or exceeds 40 tons per year ("tpy"). *Id*. § 52.21(b)(23).

The Draft Manual provides detailed guidelines for the emissions netting process and examples of emissions netting. *See* Draft Manual at A.34-A.56. It explains that:

> Emissions netting is a term that refers to the process of considering certain previous and prospective emissions changes at an existing major source to determine if a "net emissions increase" of a pollutant will result from a proposed physical change or change in method of operation. If a net emissions increase is shown to result, PSD applies to each pollutant's emissions for which the net increase is "significant" * * *.
>
> The process used to determine whether there will be a net emissions increase * * * uses the following equation:
>
> *Net Emissions Change*
> EQUALS
> *Emissions <u>increases</u> associated with the proposed modification*
> *MINUS*

Source-wide creditable contemporaneous emissions decreases
PLUS
Source-wide creditable contemporaneous emissions increases

Id. at A.35.

The concept of what increases or decreases are "creditable" is significant to DOH's analysis in this case. Among other things, to be creditable a contemporaneous emissions *decrease* must be federally-enforceable on and after the date that construction on the proposed modification begins. *Id*. at A.38. Further:

> An emissions increase or decrease is creditable only if the relevant reviewing authority has *not* relied on it in issuing a PSD permit for the source, and the permit is still in effect when the increase in actual emissions from the proposed modification occurs. A reviewing authority relies on an increase or decrease when, after taking the increase or decrease into account, it concludes that a proposed project would not cause or contribute to a violation of an increment or ambient standard. In other words, an emissions change at an emissions point which was considered in the issuance of a previous PSD permit for the source is *not* included in the source's "net emissions increase" calculation. This is done to avoid "double counting" of emissions changes.

Id. at A.40.

The Draft Manual recommends a six-step procedure for applying the emissions netting equation. Step one involves determining the emissions increases from the proposed modification. *Id*. at A.46. In the present case, the allowable NO_X emissions from the Project total 370.9 tpy, well over the 40 tpy significance level. Supplement B.1 at 4. Step two involves identifying the beginning and ending dates of the "contemporaneous" period. Draft Manual at A.46. The contemporaneous

period is not at issue in this case. Steps three and four involve determining which emissions units at the source have experienced an increase or decrease in emissions during the contemporaneous period, and which of those emissions changes are creditable. Step five involves determining on a pollutant-by-pollutant basis the amount of each contemporaneous and creditable emissions increase and decrease. *Id*. at A.48. Finally, step six calls for the contemporaneous and creditable increases and decreases to be summed to determine if a significant net increase will occur. *Id*. at A.49.

2. *DOH's Netting Analysis for the Project*

In the present case, DOH determined that there were no contemporaneous creditable increases. Supplement B.1 at 2-3; Supplement B at 6-7. DOH considered the pending PSD permit modification for Unit CT-2, which requested an increase of the NO_X emissions limit for that turbine. DOH determined, however, as discussed more fully below that the proposed increase for Unit CT-2 had already been relied upon when the PSD permit for that turbine was issued. Supplement B at 7.

As to creditable decreases, DOH considered the effect on emissions from the permanent shutdown of Units D-18, D-19, and D-20, and from the fuel restrictions placed on Unit D-21. To quantify the emissions decreases, DOH considered an average of actual emissions for 1995 and 1996 for all four units (consistent with the Draft Manual and regulations), and determined that they accounted for NO_X emissions of 342.9 tpy. With the fuel restrictions, Unit D-21 would have allowable emissions of 11.8 tpy. DOH then calculated the net emissions increase by adding the estimated maximum emissions of 370.9 tpy from the Project with the 11.8 tpy allowable emissions from Unit D-21 (operating under fuel restrictions), and subtracting the average annual emissions for Units

D-18, D-19, D-20 and D-21, which yielded a net emissions increase of 39.8 tpy. Supplement B.1 at 4. [11]

DOH concluded that the emissions netting procedure conformed to state and federal requirements. *Id*. It noted that HELCO's draft permit was being revised to incorporate conditions for the permanent shutdown of Units D-18, D-19, and D-20 and conditions limiting the fuel consumption of Unit D-21. *Id*. DOH concluded that "[w]ith the incorporation of federally enforceable permit conditions the net emission increase of NO_X from the proposed project will be below the PSD significance level. As such, the PSD review requirements, including the application of Best Available Control Technology for NO_X, are not required for the proposed project." *Id*. at 8-9. The Petitioners now raise four primary grounds in support of their requests that we review DOH's netting analysis, each of which will be discussed below.

3. *Potential Increase in Actual Emissions of Other Units*

Several Petitioners argue that the potential effects on other NO_X emission units were not evaluated. Specifically, they argue that potential increases in emissions from Units D-22, D-23 and CT-2 should have been considered. KCP Petition at 4-8; Rothstein Petition at 4; KDC Petition at 3-4; Tanzella Petition at 5. DOH responds that Units D-22, D-23 and CT-2 were properly excluded from the netting analysis because all potential emissions from those units were relied upon by DOH in issuing previous PSD permits for those units. Department of Health's Response to Petitions 97-15 through 97-23 (DOH's Response) at 8-9.

As noted above, an emissions increase is not "creditable" if it has already been relied upon in issuing a PSD permit for the source. 40

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[11]There does appear to be a typographical error on one line of the table on page 4 of Supplement B.1. The table refers to emissions for units "D18, D19, D21, & D23." Those units were used in the initial netting analysis (Supplement B). This line should read "D18, D19, D20, & D21." The remainder of Supplement B.1 refers to the correct units.

C.F.R. § 52.21(b)(3)(iii); Draft Manual at A.40. The Draft Manual illustrates the operation of this rule with several examples:

> For example, an emissions increase or decrease already considered in a source's PSD permit (state or federal) cannot be considered a contemporaneous increase or decrease since the increase or decrease was obviously relied upon for the purpose of issuing the permit. * * * In another example, a decrease in emissions from having previously switched to a less polluting fuel (e.g., oil or gas) at an existing emissions unit would not be creditable if the source had, in obtaining a PSD permit (which is still in effect) for a new emissions unit, modeled the source's ambient impact using the less polluting fuel.

Draft Manual at A.40. The purpose of this rule is to avoid "double-counting" of emission changes. *Id.*

Although the Petitioners argue that HELCO may change the operation of Units D-22, D-23 and CT-2 thereby causing emissions increases from those units that could cause the actual emissions from the Station to increase by more than the 40 tpy PSD significance level, emissions from those units are simply irrelevant to the netting analysis. For example, KCP points out that in 1994-95 the actual NO_X emissions for D-22 were 68.8 tpy, yet the unit has the potential, in its PSD permit, to emit 299.6 tpy. KCP's Petition at 6. Actual emissions for CT-2 in 1995-96 were 41.5 tpy, yet that unit has the potential, in its PSD permit, to emit 211 tpy. *Id*. KCP reasons that HELCO could easily cause NO_X emissions to increase above the 40 tpy significance level by operating these units more. *Id*. However, all of these potential increases in emissions from Units D-22, D-23 and CT-2 have already been accounted for in their permits, 1997 Response to Comments at 23, and thus those potential increases cannot be considered in the netting analysis for the

Project.[12] Accordingly, DOH correctly excluded from consideration any potential emissions from Units D-22, D-23, and CT-2 that had been relied upon by DOH in issuing the permits for those units.

In a related claim, KCP contends that because HELCO is requesting a permit modification for Unit CT-2 that would increase allowable emissions from that unit, the proposed increase is creditable for purposes of the netting analysis. This claim also must be rejected. HELCO's CT-2 PSD permit modification request seeks to raise allowable NO_X emissions for CT-2 from 34.8 pounds per hour to 46 pounds per hour. However, as DOH pointed out in its response to public comments and in its response to KCP's petition for review, the PSD permit for Unit CT-2 was based on an ambient air quality analysis that assumed an emissions rate of 48.2 pounds per hour. DOH has explained that:

> In the PSD permit for CT-2, the USEPA and the DOH, with HELCO's concurrence, reduced the allowable NO_X emission rate from 48.2 to 34.8 pounds per hour with a permit condition which allows a higher emission limit if HELCO can adequately demonstrate that a water to fuel mass ratio of 1 to 1 is necessary and that excessive turbine wear or unacceptable characteristics are occurring. In order for the DOH to commit to that permit condition, the DOH had to rely upon, and continually is relying upon a 48.2 pounds per hour, or 60 ppmvd, emission rate limit for CT-2. Had the DOH not relied upon the 48.2 pound per hour, or 60 ppmvd, emission limit, CT-2's permit would not have included a permit condition to raise the emission limit. The permit would have remained silent on the issue * * *.
>
> Under the CT-2 permit condition which allows an emission rate increase, HELCO has requested to increase

[12]Of course, any exceedance of the permitted emissions limits would expose HELCO to enforcement action.

> the current maximum allowable emission rate of CT-2 from 34.8 pounds per hour, 42 ppmvd, to 46.0 pounds per hour, 55 ppmvd, as allowed in the permit condition. The requested increase is not a creditable contemporaneous increase because the requested emission rate increase is below the relied upon emission rate of 48.2 pounds per hour, 60 ppmvd. In other words, the requested rate increase has been relied upon in the issuance of a previous PSD permit and is, therefore, not creditable.

1997 Response to Comments at 22. This extended quote shows that DOH did "rely upon" 48.2 pounds per hour as the emissions increase when it issued the PSD permit for CT-2, within the meaning of the netting regulations and the Draft Manual. *See* 40 C.F.R. § 52.21(b)(3)(iii); Draft Manual at A.40. Therefore, the pending proposal to increase emissions from Unit CT-2 to a rate that is still *below* 48.2 pounds per hour is not a creditable emissions increase, and DOH did not err in excluding the proposed increase from its netting analysis. [13]

4. *Federally Enforceable Limits*

Several Petitioners argue that the emissions reductions resulting from the shutdown and curtailment of Units D-18, D-19, D-20 and D-21 are not federally-enforceable. KCP Petition at 4; Rothstein Petition at 4;

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[13]Some Petitioners (other than KCP) have contended that the CT-2 PSD permit may not be relied upon as a basis for excluding that unit from the netting analysis, because the permit expired in July 1994. *See, e.g.*, Rothstein Petition at 4. Some Petitioners also argue that reductions from the shut-down of Units D-18, D-19 and D-20 may not be used in the netting analysis because those Units do not have valid operating permits. *See, e.g.*, Rothstein Petition at 4. However, at the time of expiration of the permit for Unit CT-2, HELCO had already submitted its modification application, and thus the permit continues in effect. *See* Hawaii Admin. R. 11-60.1-87. Likewise, DOH has determined that HELCO submitted complete and timely covered source permit applications, thereby continuing the authority to construct or operate until the applications are issued or denied. *Id.*

Tanzella Petition at 5; Mosher Petition at 2. The Petitioners are correct that an emission reduction must be federally enforceable. Draft Manual at A-38. However, the Permit does include federally-enforceable conditions requiring the shutdown of Units D-18, D-19, D-20, and a fuel restriction on D-21. *See* Permit, §§ C.10 & C.11.

5. *Load Shifting*

Petitioners also claim that DOH erred by failing to include limits in the Permit to prevent "load shifting" to Units D-22, D-23 or CT-2 following shutdown and curtailment of Units D-18, D-19, D-20 or D-21. KCP Petition at 5; KDC Petition at 3-4; Rothstein Petition at 4; Tanzella Petition at 5, 7. By "load shifting," the Petitioners mean the potential for an existing unit that has historically been operated at less than full capacity to be used at an increased operational level for the purpose of compensating for the shutdown of another unit. The Petitioners argue that EPA policy requires emission caps in such circumstances. For example, KCP relies on a memorandum from Darryl Tyler, Control Programs Development Division of the U.S. EPA Office of Air Quality Planning and Standards, to David Kee, Director, Air Management Division, Region V, entitled "Need for Emission Cap on Complex Netting Sources" (Dec. 1, 1986) (the "Tyler Memorandum"). *See* Petition at 5.

KCP is mistaken, however, in its reliance on the Tyler Memorandum because according to the Tyler Memorandum the concern regarding load-shifting arises where the increased operation of the unrestricted units is "for the sole purpose of compensating for the shutdown unit." Tyler Memorandum at 2. KCP has not shown any clear error in DOH's conclusion that any subsequent increase in emissions from Units D-22, D-23 and CT-2 would not be solely to compensate for any change in operation associated with the Project. DOH stated in its response to comments as follows:

> [T]he power generated from the operation of combustion turbines CT-4 and CT-5 will more than make up for the retirement of Units D-18, D-19 and D-20 and the

> operational restrictions on unit D-21. As such, there is no indication that units CT-2, D-22 and D-23 will be operated any more than the historical trend to make up for the retirements and restrictions of Units D-18, 19, 20 and 21.

1997 Response to Comments at 23. KCP has not shown that this response to comments is clearly erroneous. KCP's arguments that emissions from the existing units might increase is not sufficient to show clear error because it is unsupported speculation, and KCP has not otherwise explained why DOH's conclusion to the contrary is erroneous.

6. *Netting Policy*

Finally, several Petitioners contend that DOH has allowed HELCO to abuse the process and the intent of the PSD regulations by inappropriately netting out of PSD review. KCP Petition at 13-14; KDC Petition at 4. For example, KCP argues that "[i]n assisting HELCO's efforts, DOH clearly abused its discretion. As a policy matter the EPA should clear the air and institute strong guidelines for future applications using netting by denying this permit." KCP Petition at 14.

KCP is understandably frustrated that its competitor may have avoided the imposition of more-stringent emission controls (specifically, selective catalytic reduction, or SCR, for control of NO_X) that were made a condition of KCP's permit.[14] But the PSD regulations only apply to emissions for which the net increase is "significant," and the regulations provide a means for determining significance, taking into account a source's creditable and contemporaneous emissions increases and decreases. Although HELCO's initial application did not use netting to

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[14]It is worth noting, however, that HELCO's permit allows DOH, at a later time, to require the use of SCR for control of NO_X even though the Project netted out of the BACT requirements for NO_X. Permit, § A.4. DOH included this condition as an exercise of its authority to include more-stringent permit conditions than the regulations require. 1997 Response to Comments at 3.

determine the level of its NO_X emissions, there is nothing in the Clean Air Act or PSD regulations that forbids HELCO from subsequently electing to use a netting approach to reduce its net NO_X emissions. In order to achieve that reduction, HELCO was required to accept permit conditions mandating the shutdown and curtailment of existing emission sources. DOH's approval of HELCO's netting approach is not clearly erroneous, nor does it involve an important matter of policy or exercise of discretion that warrants the Board's review. Moreover, contrary to the suggestion of some Petitioners,[15] the authority retained by DOH to require HELCO to add SCR technology upon completion of the Maui Demonstration Project, Permit § A.4, is an extra protection sought by DOH, which DOH was not required to retain under federal law because the Project netted out of the BACT requirement for NO_X.

For the foregoing reasons, the Petitioners have not satisfied the stringent requirements of showing that DOH made a clearly erroneous finding of fact or law, or that review is otherwise warranted with respect to DOH's approval of HELCO's NO_X netting proposal.[16] Accordingly,

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[15]Rothstein Petition at 4; KCP Petition at 10; KDC Petition at 5-7.

[16]Several additional arguments can be summarily rejected. Several Petitioners argue that BACT is still required for NO_X pursuant to the delegation agreement as an "unregulated" pollutant. KDC Petition at 5-7; *see also* Rothstein Petition at 4. DOH responds that this argument was not raised during the public comment period. DOH Response at 20. The Petitioners have not shown that this issue was properly raised and based on DOH's responses to comments, it does not appear that this issue was raised during the public comment period. Accordingly, review is denied. Several Petitioners also argue that HELCO cannot be relied upon to self-monitor its performance of fuel restrictions because of its alleged outstanding violations. KDC Petition at 11; KCP Petition at 17. However, DOH's responses to comments stated that the Permit included conditions specifying the means for testing compliance, and the Petitioners have not shown how any alleged history of past violations shows that these compliance testing procedures will be circumvented by HELCO. Accordingly, Petitioners have not shown that DOH's response to comments was not adequate. Mr. Mosher also argues that the netting analysis is not valid because HELCO allegedly promised not to expand the Station and that "[t]herefore, the addition of CT-4 and CT-5 will add a creditable increase in emissions." Mosher Petition at 2. This argument is rejected because the

(continued...)

we deny review of DOH's determination that BACT is not required to control NO_X emissions from the Project.

C. *BACT for Sulfur Dioxide (SO_2)*

KCP also requests that the Board review the Permit's conditions specifying BACT for controlling SO_2 emissions, which provide that HELCO may burn fuel oil no.2 in combustion turbines CT-4 and CT-5. KCP objects to this provision, asserting that the Permit should require burning of naphtha fuel for at least the first two years. It argues that review is warranted because, according to KCP, naphtha fuel is cost effective, available and technically feasible. KCP Petition at 16. In support of its arguments that naphtha fuel is cost effective and available, KCP cites a letter from David Howekamp, Director Air and Toxics Division, Region IX to DOH dated February 6, 1996 (the "Howekamp Letter"). As further support of its contention that naphtha is available, and in support of its contention that naphtha is technically feasible, KCP cites DOH's own BACT analysis set forth in the Supplement B to the AAQ Report. KCP also cites the PSD permit issued to KCP and the PSD permit application of another electric power utility, Enserch Development Corporation ("EDC"), as evidence that naphtha is cost effective.

As discussed below, we deny KCP's request for review of the Permit's conditions specifying BACT for the control of SO_2 emissions because KCP has not shown clear error in DOH's determination to eliminate naphtha due to uncertainty regarding naphtha's availability. We also hold that DOH's determination regarding the issue of availability was sufficient to eliminate naphtha as BACT, without considering issues of cost effectiveness.

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[16](...continued)
determination of "creditable" emissions increases is determined based on the criteria set forth in the regulations, which do not include alleged promises regarding limits on future expansion. We also reject consideration of any alleged promise not to expand the Station as such issues fall outside of the purview of the Board's review.

1. *Background: Top-down BACT Analysis*

As noted above, the PSD regulations require that new major stationary sources and major modifications of such sources employ the "best available control technology," or BACT, to minimize emissions of regulated pollutants. 42 U.S.C. § 7475(a)(4); 40 C.F.R. § 52 .21(j)(2). Under the guidance of the Draft Manual, permit issuers use a "top-down" method for determining BACT:

> The top-down process provides that all available control technologies be ranked in descending order of control effectiveness. The PSD applicant first examines the most stringent -- or "top" -- alternative. That alternative is established as BACT unless the applicant demonstrates, and the permitting authority in its informed judgment agrees, that technical considerations, or energy, environmental, or economic impacts justify a conclusion that the most stringent technology is not "achievable" in that case.

Draft Manual at B. 2.

The Draft Manual provides for a five-step procedure for implementing the top-down analysis. The first step is to identify all potentially available control options. Draft Manual at B.5. The second step, which as discussed below was central to DOH's decision in the present case, is to eliminate "technically infeasible" options. *Id*. at B.7. This step involves first determining for each technology whether it is "demonstrated," which means that it has been installed and operated successfully elsewhere, and if not demonstrated, then whether it is both "available" and "applicable." Technologies identified in step one but that are not demonstrated and either not available or not applicable are eliminated under step two from further analysis. *Id*. at B.7.

In step three of the top-down analysis, the remaining control technologies are ranked and then listed in order of control effectiveness for

the pollutant under review, with the most effective alternative at the top. *Id.* at B.7. In the fourth step of the analysis, the energy, environmental, and economic impacts are considered and the top alternative is either confirmed as appropriate or is determined to be inappropriate. *Id.* at B.29. Issues regarding the cost effectiveness of the alternative technologies are considered under step four. *Id.* at B.31-B.46. Finally, under step five, the most effective control alternative not eliminated in step four is selected as BACT. *Id.* at B.53.

The issues raised by KCP in the present case regarding availability and technical feasibility arise under the Draft Manual's guidelines for step two of the top-down BACT analysis, and the issues regarding cost effectiveness arise under step four. *In re Maui Elec. Co.*, PSD Appeal No. 98-2, slip op. at 7-8 (EAB, Sept. 10, 1998), 8 E.A.D. __. Because we find, as discussed below, that KCP has not shown any clear error in DOH's determination under step two that naphtha is not BACT due to questions regarding its long-term availability, we do not need to consider KCP's arguments regarding cost effectiveness under step four.

In *Maui Electric*, we considered a petition for review of a PSD permit involving issues arising under step two in circumstances very similar to the present case. There, Waimana Enterprises, Inc. ("Waimana") requested that we review DOH's determination that fuel oil no. 2, not naphtha, would be required as BACT for controlling SO_2 emissions under a PSD permit issued to Maui Electric Company, Ltd ("MECO") for a project located on the Island of Maui. Waimana, the petitioner in that case, is an affiliate of KCP, a petitioner in this case; and the permit applicant in that case, MECO, is an affiliate of HELCO, the permit applicant in this case. In its petition for review, Waimana sought to raise on appeal many of the same issues over which KCP now seeks review in the present case, including consistency of the BACT determination with both the conditions of the permit issued to KCP and the EDC application, and the allegation that the Howekamp Letter shows that the Region had determined that naphtha is both available and cost

effective. In *Maui Electric*, we denied review of DOH's determination that naphtha would not be required as BACT.

Our decision in *Maui Electric* not to review DOH's determination that naphtha is not BACT for MECO's project, however, does not necessarily require a similar result in this case. In general, BACT determinations are to be made on a case-by-case basis. 42 U.S.C. § 7479(3); 40 C.F.R. § 52.21(b)(12); *accord In re Robins Resource Recovery Co.*, 3 E.A.D. 649, 652 n.5 (Adm'r 1991) (noting that BACT determinations might differ from location to location, even though the technology employed may be identical); *In re CertainTeed Corp.*, 1 E.A.D. 743, 747-749 (Adm'r 1982) (explaining that BACT determinations are "tailor-made for each pollutant emitting facility" based on detailed, site-specific information). Furthermore, we are charged with reviewing the specific issues presented to us in each case. [17] Nevertheless, our analysis in this case is guided by the same general principles regarding the question of availability that guided our analysis in *Maui Electric*.

2. *Step Two: The Issue of Availability*

With respect to the issues arising under step two of the top-down analysis, KCP argues in its Petition that (1) DOH concluded in the Supplement B to the AAQ Report that burning of naphtha by Units CT-4 and CT-5 is considered technically feasible, (2) DOH's determination regarding the questionable long-term availability of naphtha is "contrary to DOH and EPA's requirement that [KCP] burn naptha [*sic*] for at least the first two years," (3) the Howekamp Letter shows that the Region has determined that naphtha is available, and (4) DOH concluded in

[17]Moreover, in *Maui Electric*, we held that Waimana had failed to raise many of its objections during the public comment period and, therefore, we held that Waimana had failed to preserve those issues for appeal. In contrast, here it is clear from DOH's Response to Comments that the issues regarding consistency between the permits and regarding the Region's statements in the Howekamp Letter were raised during the public comment period in this case. *See* 1997 Response to Comments at 26-27, 29 (responding to comments regarding KCP permit, EDC application and Region's statement regarding availability).

Supplement B that local refineries indicate a current surplus of naphtha. KCP Petition at 16. These arguments, however, do not show that DOH's determination to eliminate naphtha out of concern regarding its long-term availability was clearly erroneous.

a. *DOH's Finding of "Technical Feasibility"*

DOH's finding that naphtha is "technically feasible" does not show that DOH erred in determining to reject naphtha as BACT for SO_2. In *Maui Electric*, we held that because step two of the top-down BACT analysis requires consideration of both applicability and availability, a control technology may be eliminated on the grounds of availability even though it is applicable. *Maui Electric*, slip op. at 17-18. Here, DOH's determination in Supplement B that the burning of naphtha fuel in Units CT-4 and CT-5 is technically feasible was based on DOH's conclusion that HELCO's Project could be modified to burn naphtha. Supplement B at 3. That conclusion regarding the feasibility of the modifications was stated under the heading "Technical Feasibility -- Applicability." *Id.* Accordingly, DOH's finding of technical feasibility related only to naphtha's applicability to HELCO's Project, and did not preclude DOH from eliminating naphtha under step two out of concern over naphtha's long-term availability. *Maui Electric*, slip op. at 18. Thus, the central issue regarding the SO_2 BACT determination in this case is whether KCP has shown any clear error in DOH's determination that naphtha has a questionable long-term availability.

b. *The KCP Permit and EDC Application*

We reject KCP's argument that DOH's finding in this case is contrary to both the application for a different electric power generating facility submitted by EDC and the KCP permit's conditions for use of naphtha. In its Response to Comments, DOH stated as follows:

> Although other proposed power generating facilities, Ensearch Development Company (EDC) and Kawaihae Cogeneration Partners (KCP), are proposing to use

> naphtha, the DOH determined that naphtha was not BACT for these proposed power generating facilities. EDC elected to burn naphtha because of the predicted exceedance of the SO_2 ambient air quality standard using diesel fuel. EDC did not propose naphtha as BACT, but as an alternative to restrictive operating permit conditions which would be applied if EDC elected to burn diesel fuel.

1997 Response to Comments at 27. Our decision denying review of the PSD permit issued to KCP confirms that naphtha was *not* determined to be BACT for SO_2 in the KCP case. We summarized the SO_2 BACT analysis as follows:

> With respect to the use of low-sulfur fuels, the record shows that DOH considered low-sulfur (0.08% by weight) naphtha fuel as BACT for SO_2, *but ultimately decided not to select naphtha as BACT because of concerns for long-term availability and cost of the fuel on the island.* The permit instead allows KCP to use a 0.4% by weight sulfur content diesel fuel as BACT for SO_2. However, because KCP offered to burn low-sulfur naphtha for the first two years, and thereafter when it is available and cost effective, the permit allows KCP to burn naphtha.

In re Kawaihae Cogeneration Project, PSD Appeal Nos. 96-9 to 96-11, 96-14 & 96-16, slip op. at 33 (EAB, Apr. 28, 1997), 7 E.A.D. __ (citations omitted)(emphasis added). Thus, it is clear that DOH has consistently stated that it has concerns regarding naphtha's long-term availability.

Although in appropriate circumstances other permits or permit applications, such as the KCP permit and the EDC application, may serve

as evidence that a particular control technology is available, [18] here the existence of KCP's and EDC's voluntary undertaking to burn naphtha is not sufficient to show that naphtha is available to support HELCO's project. DOH noted in its response to comments that the available supply of naphtha in Hawaii is limited and that historically the excess naphtha produced was not sufficient in three out of five years to support HELCO's Units CT-4 and CT-5. 1997 Response to Comments at 27; *see also* Supplement B at 1-2. KCP has not shown how the conditions of the KCP permit and EDC's application prove that the supply of naphtha is sufficient not only for the KCP and EDC projects, but also for HELCO's Units CT-4 and CT-5. Accordingly, the KCP permit and EDC application are not sufficient evidence of availability to show clear error in DOH's determination that naphtha is not available for the HELCO Project.

c. *The Howekamp Letter*

We also reject KCP's reliance on the February 6, 1996, Howekamp Letter as allegedly showing clear error in DOH's analysis. KCP argues that the Howekamp Letter shows that the Region "has been clear that naphtha is * * * available." KCP Petition at 16. Although the Region did state in the Howekamp Letter that "BHP Petroleum of Hawaii has informed us that they are able to provide sufficient amounts of Naphtha to fire CT Units 4 and 5," Howekamp Letter at 2, the Howekamp Letter nevertheless does not show that the Region disagrees with DOH's BACT determination in this case.

After the date of the Howekamp Letter, the Region specifically requested that DOH reevaluate naphtha with respect to both availability and cost effectiveness. *See* Letter from Ken Bigos, EPA Region IX, to Wilfred K. Nagamine, DOH (April 17, 1996). DOH responded to the Region's request and prepared its reevaluation in Supplement B. There, DOH concluded that naphtha is not BACT for HELCO's Units CT-4 and

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[18] *See, e.g., In re Old Dominion Elec. Corp.*, 3 E.A.D. 779, 794-795 (Adm'r 1992) (considering whether other permits requiring SCR showed that rejection of SCR on technical grounds was clearly erroneous).

CT-5 due to concerns regarding long-term availability. DOH not only considered the statement by BHP regarding availability, it also considered whether naphtha would be available from another local refinery, Chevron U.S.A. DOH stated as follows:

> The two local refineries, Chevron USA and BHP Hawaii, indicated a current surplus of naphtha fuel. Chevron USA will not indicate a specific volume of excess naphtha unless there is an agreement on price, specification, delivery and custody transfer. In addition, Chevron USA stated that the supply of naphtha is subject to fluctuations in crude feedstock, internal demand, and the process equipment operating parameters.
>
> Although BHP indicated an excess of 5,000-7,000 barrels per day, it is unclear if this estimate excludes the usage at the refinery and current contracts to export naphtha. According to a report generated by State of Hawaii Department of Business [DOB], the total amount of naphtha produced for calendar years 1991 through 1995 varied between 958,000 to 2,100,00 barrels per year. Of this, a large portion was used at the refineries or sold locally. The excess naphtha supply varied from 163,000 barrels per year in 1994 to 1,280,000 barrels per year in 1991.
>
> The results of the report suggest that BHP's estimated excess of 5,000 barrels per day may not include the amount used by BHP and the amount sold under current contracts. The [DOB] data also shows that the fluctuating supply of naphtha was insufficient for three out of five years to support such a project as that proposed by HELCO. HELCO requires 700,000 plus barrels per year.

Supplement B at 2. After DOH prepared this analysis, the Region concurred in October 1997 with DOH's issuance of the Permit specifying that fuel oil no.2 is BACT for controlling SO_2 emissions. Record H.1. In these circumstances, we find that the Region's statement in the Howekamp Letter early in the process of evaluating BACT does not show clear error in DOH's subsequent contrary determination made after full analysis of the information in the administrative record, particularly where the Region ultimately concurred in the issuance of the Permit.

d. *DOH's Statements in Supplement B*

Finally, we reject KCP's reliance on Supplement B as showing that DOH committed clear error. KCP argues that "DOH also concluded that '[t]he two local refineries, Chevron USA and BHP Hawaii, indicated a current surplus of naphtha fuel.'" KCP Petition at 16 (quoting Supplement B at 2).

DOH's analysis set forth in Supplement B shows consideration and balancing of the competing evidence in the record. DOH stated that the "[l]ong term availability is sketchy at best because of the circumstances associated with naphtha production." Supplement B at 1. DOH's analysis leading to this conclusion is quoted in part above. It is evident from a review of DOH's analysis that DOH considered both the statements from the two local refineries, their lack of commitment as to availability of a specific volume of excess naphtha, and the report by the DOB, which DOH described as showing that "fluctuating supply of naphtha was insufficient for three out of five years to support such a project as that proposed by HELCO," which would require more than 700,000 barrels per year. *Id.* In Supplement B, DOH specifically concluded that the results of the DOB report suggest that BHP's estimate of excess naphtha may not take into account "the amount used by BHP and the amount sold under current contracts." *Id.*

In its Response to Comments, DOH restated its conclusion that "[c]urrently, the long term availability of naphtha is sketchy at best because of the circumstances associated with naphtha production," and

that "the fluctuating supply of naphtha was insufficient for three out of five years to support a generating station requiring 700,000 plus barrels of naphtha per year." 1997 Response to Comments at 27. DOH also stated in its response to comments as follows:

> A report prepared by the [DOB] showed the surplus supply of naphtha has fluctuated significantly in recent years. Based on this report, the current supply of naphtha may be insufficient to operate the two combustion turbines and additional naphtha will need to be manufactured or imported. As such, the DOH has determined that the burning of diesel fuel no.2 is BACT for SO_2 for this project. See Supplement B of the Ambient Air Quality Impact Report for further discussion.

Response to Comments at 24.

We reject KCP's argument that Supplement B shows clear error because KCP has not shown that DOH's response to comments is not adequate. *See, e.g., Maui Elec.*, slip op. at 19*; In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 780 (EAB 1997) (petitioner failed to explain "why the State's response is clearly erroneous."); *In re Envotech, L.P.*, 6 E.A.D. 260, 268-269 (EAB 1996) (holding that the petitioner must demonstrate why the permit issuer's response to objections is clearly erroneous or otherwise warrants review). In *Maui Electric*, we explained that, to demonstrate why a response to comments is clearly erroneous, "where an alternative control option has been evaluated and rejected, those favoring the option must show that the evidence 'for' the control option *clearly outweighs* the evidence 'against' its application." *Maui Elec.*, slip op. at 19 (quoting *In re Inter-Power of New York, Inc.*, 5 E.A.D. 130, 144 (EAB 1994).

Here, KCP's Petition merely argues that the Supplement B shows that "DOH's [*sic*] also concluded that '[t]he two local refineries, Chevron USA and BHP Hawaii, indicated a current surplus of naphtha fuel.'" KCP

Petition at 16 (quoting Supplement B at 2). KCP does not discuss DOH's response to comments that it relied upon the information set forth in the report prepared by the DOB in concluding that the statements by BHP and Chevron may not take into account other uses of naphtha and that naphtha is not available in an amount sufficient to support HELCO's Project. KCP also does not explain why it was clear error for DOH to rely upon the DOB report. KCP also has not attempted to show any clear error in the historical data relied upon by DOH regarding naphtha production; nor has KCP otherwise attempted to show that naphtha can be imported or produced locally in sufficient amounts and with sufficient reliability to support Units CT-4 and CT-5. Because KCP has not attempted to demonstrate in its Petition why the information upon which it seeks to rely clearly outweighs the information reported by the DOB and relied upon by DOH, KCP has failed to meet the requirement of showing that DOH's response is not adequate. For these reasons, none of KCP's arguments show clear error in DOH's determination to eliminate naptha from being required as BACT out of concern for naphtha's long-term availability.

3. *Step Four: Cost Effectiveness*

KCP also argues that naphtha should have been selected as BACT because its cost effectiveness is shown by the Howekamp Letter, the KCP permit and the EDC application.[19] However, because we have found above that KCP has not shown any clear error in DOH's determination to eliminate naphtha on the grounds of availability under step two, we do not

[19]KCP's principal argument is that, in most cases, cost effectiveness is determined based on whether the cost to the applicant is within or outside the range of costs being borne by other facilities, but that, in this case, DOH failed to consider KCP's and EDC's determination that naphtha is cost effective. KCP is correct that a comparison of the costs borne by similar facilities is generally required. *In re Masonite Corp.*, 5 E.A.D. 551, 566 (EAB 1994). We have also observed that "the absence of such information [regarding costs borne by other facilities] makes a cost-effectiveness determination more vulnerable to attack." *Inter-Power*, 5 E.A.D. at 149. However, because we do not reach the issue of cost effectiveness, we do not decide whether DOH's analysis of cost effectiveness, and in particular DOH's 1997 Response to Comments ¶ 16, at 26, was sufficient under the standards established in *Masonite* and *Inter-Power*.

need to consider KCP's arguments regarding cost effectiveness. Issues regarding the cost effectiveness of alternative control technologies are considered under step four. Draft Manual at B.31-B.46. A control technology that is eliminated under step two, however, does not need to be reviewed under step four. Draft Manual at B.7. *Compare In re Old Dominion Electric Corp.*, 3 E.A.D. 779, 794-795 (Adm'r 1992) (control technology eliminated as not technically feasible under step two), *with In re Masonite Corp.*, 5 E.A.D. 551, 567 nn.21 & 24 (EAB 1994) (distinguishing cost effectiveness from the review of technical feasibility performed in *Old Dominion*). Accordingly, we deny KCP's request that we review DOH's determination that fuel oil no.2 is BACT for controlling SO_2 emissions.

D. *Issues Regarding the Ambient Air Quality Impact Analysis*

Many of the Petitioners seek review of the Permit on the grounds that DOH allegedly erred in performing the air quality and source impact analysis. Several Petitioners generally argue that DOH was required to perform a background ambient air quality analysis for SO_2, NO_2, particulate matter, CO and O_3, and that the data used by DOH regarding the concentrations of these pollutants were not representative of the air quality in the areas that would be impacted by emissions from the Project. In addition, several Petitioners argue that the data regarding both meteorological conditions and emissions from other pollution sources were not representative of, respectively, the meteorological conditions at the Station and the actual emissions from other pollution sources. One Petitioner also argues that the modeling program used by DOH did not adequately reflect local geographic and meteorological conditions. For the following reasons, we deny in part and grant in part review of DOH's ambient air and source impacts analysis, and remand to DOH for further proceedings.

1. *Background*

The CAA provides that, prior to reviewing a PSD application, there must be an analysis "of the ambient air quality at the proposed site

and in areas which may be affected by emissions from such facility for each pollutant subject to regulation under this chapter which will be emitted from such facility." CAA § 165(e)(1), 42 U.S.C. § 7475(e)(1). The CAA provides further that:

> the analysis required by this subsection shall include continuous air quality monitoring data gathered for purposes of determining whether emissions from such facility will exceed the maximum allowable concentration permitted under this part. Such data shall be gathered over a period of one calendar year preceding the date of application for a permit under this part * * *.

CAA § 165(e)(2), 42 U.S.C. § 7475(e)(2). Furthermore, the results of the required air quality analysis "shall be available at the time of the public hearing on the application for such permit." CAA § 165(e)(3)(C), 42 U.S.C. § 7475(e)(3)(C).

Regulations adopted under the CAA provide that the air quality analysis generally must include both an analysis of existing air quality and a "source impact analysis." 40 C.F.R. § 52.21(k), (m). Further, "[i]n general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application * * *." *Id.* § 52.21(m)(1)(iv). The source impacts analysis must demonstrate that "allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of" the NAAQS or PSD increment. *Id.* § 52.21(k). The regulations also state that "[a]ll estimates of ambient concentrations required under this paragraph shall be based on applicable air quality models, data bases, and other requirements specified in appendix W of part 51 of this chapter (Guidelines on Air Quality Models)." *Id.* § 52.21(l)(A). Appendix W of 40 C.F.R. part 51 ("Appendix W") describes, among other things, the dispersion modeling that may be used in the source impact analysis.

In the present case, DOH described its analysis of ambient air quality and source impacts in the AAQ Report (Sept. 28, 1995). DOH stated that "[a]ll modeling was performed in accordance with USEPA guidelines." AAQ Report at 23. It stated further that ambient air pollutant background concentration levels were developed from measurements taken at three locations. *Id.* The SO_2 and NO_2 concentration levels were measured from February 1984 to January 1985 at the Keahole Generating Station. *Id.* Total suspended particulate matter was measured at DOH's Kona Health Center, Kealakekua Station from September 1985 to August 1986. *Id.* The CO and O_3 concentration levels were measured at Waiakea Station near Hilo from September 1989 to September 1990. *Id.* DOH stated that the measured concentration of each pollutant at the respective stations were found to be less than the applicable NAAQS. *Id.*

DOH stated further that the emissions inventories used in the modeling included emissions from the proposed Project, the existing generators at the Station, and the Grace Pacific asphalt batch plant. *Id.* at 24. DOH concluded by stating that "[t]here were no predicted Class II air quality increment violation[s]," *id.* at 25, and "[t]he total air quality impact for each air pollutant will not cause or contribute to a violation of the ambient standard [NAAQS]." *Id.* at 26.

HELCO also submitted updated meteorological data in connection with its application to modify the permit for Unit CT-2. These updated meteorological data were used to further analyze the impacts of the Project. The results of this additional analysis were set forth in Supplement A to the AAQ Report, which was also dated September 28, 1995, the same date as provided for the main body of the AAQ Report. In describing the updated meteorological data, DOH stated that sequential hourly data of 10-meter wind speed and direction for stability calculations and 32-meter level winds for transport were collected near the Keahole Generating Station during the period of March 1993 through February 1994. Supplement A at 39. DOH stated further that upper air data collected near Hilo and the Keahole surface air data were used to determine the hourly mixing heights. *Id.* Using this updated data, DOH

again concluded that "[t]he predicted increment consumption was less than the allowable thresholds for all pollutants, averaging times and scenarios," Supplement A at 40, and "[t]he total predicted air quality impact for each pollutant did not cause or contribute to an exceedance of the * * * NAAQS." *Id.* at 41.

The Petitioners now seek review of various issues regarding DOH's air quality and source impacts analysis. Many Petitioners argue that the background ambient air data used by DOH were not representative either because they were out of date or taken from a nonrepresentative location. *See, e.g.*, KDC Petition at 7-11; Houser Petition at 1-3; Aguilar Petition at 1-2; Tanzella Petition at 1-4; Rothstein Petition at 2-3. In particular, the following Petitioners argue that the data for the indicated pollutants were either out of date or otherwise not representative: SO_2 (KDC, Houser, Aguilar, Tanzella, and Rothstein); NO_2 (Tanzella); particulate matter (KDC, Houser, Tanzella, and Rothstein); CO (Tanzella) and O_3 (Tanzella and Rothstein). Several Petitioners also argue that DOH committed clear error by using nonrepresentative meteorological data that do not take into account the conditions at the Station. Houser Petition at 2 (arguing that DOH failed to include analysis of differing micro climates and erred by using meteorological data from Hilo); Rothstein Petition at 3 (arguing that DOH erred by using mixing height data from Hilo).

Several Petitioners also argue that DOH's modeling analysis failed to accurately include significant emissions from other sources. *See, e.g.*, KCP Petition at 15 (arguing that the emissions for Unit CT-2 were underestimated); KDC Petition at 8 (arguing that air traffic emissions have increased); Houser Petition at 2 (same and arguing that highway traffic emissions had increased); Rothstein Petition at 3 (same). Finally, one Petitioner argues that DOH erred by using a modeling program that was not adequate to represent the geological terrain features and meteorological conditions in the Kona region. Rothstein Petition at 2. Each of these grounds for review will be discussed in detail below.

2. *Out of Date or Not Representative Ambient Air Data*

As noted, one or more of the Petitioners alleges that the ambient air data used by DOH to measure background concentrations of SO_2, NO_2, CO, O_3 and particulate matter were out of date or not representative of the ambient air in the relevant areas that would be impacted by the Project. DOH argues in response that HELCO was exempt from the preconstruction monitoring requirement for NO_2 and particulate matter "[b]ecause the predicted maximum concentrations * * * were less than their respective significance level." DOH Response at 27. By referring here to "significance level," DOH appears to mean the levels specified in 40 C.F.R. § 52.21(i)(8) for exemption from the requirement to perform an ambient air quality analysis. DOH also argues in response to the Petitions that the data for SO_2, CO and O_3 are representative of the ambient air in the affected areas. *Id.* at 27-29.

a. *NO_2 and Particulate Matter Significance Levels*

The regulations provide that the permit issuing authority may grant an exemption from the requirement to perform preconstruction air quality monitoring in the two circumstances set forth in 40 C.F.R. § 52.21(i)(8)(i) and (ii). Only the first of these potential grounds for exemption is at issue in this case.[20] This "exemption is potentially available if 'the emissions increase of the pollutant from the new source * * * would cause, in any area, air quality impacts less than' certain specified concentrations (40 C.F.R. § 52.21(i)(8)(i))." *In re EcoEléctrica, L.P.*, PSD Appeal Nos. 96-8 & 96-13, slip op. at 8 (EAB, Apr. 8, 1997), 7 E.A.D. __. In *EcoEléctrica*, we referred to these specified concentrations as "monitoring *de minimis* levels," thereby "highlighting their role in assessing the need for preconstruction ambient monitoring."

[20] *See* AAQ Report at 25, tbl.4 at 34; Supplement A at 39, tbl.1 at 43.

Id. at 9.[21] The monitoring *de minimis* level for impacts on NO_2 is 14 $\mu g/m^3$, annual average, and for particulate matter is 10 $\mu g/m^3$ of PM_{10}, 24-hour average. 40 C.F.R. § 52.21(i)(8)(i).

In the present case, DOH's analysis showed that the predicted impact on NO_2 of emissions from the Project would be only 6 $\mu g/m^3$, annual average, well below the monitoring *de minimis* level of 14 $\mu g/m^3$, annual average. Supplement A tbl.1, at 43. Thus, DOH is correct that HELCO is eligible for an exemption from preconstruction monitoring of NO_2 ambient air quality.[22]

With respect to particulate matter,[23] however, DOH's supplemental analysis showed that the predicted impact of PM_{10} from the Project would be 11 $\mu g/m^3$, 24-hour average, above the monitoring *de minimis* level of 10 $\mu g/m^3$, 24-hour average. Supplement A tbl.1, at 43.[24] Although DOH's analysis in the main body of the AAQ Report showed that the predicted impact of PM_{10} would be 9 $\mu g/m^3$, 24-hour average,

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[21]The regulations refer to these monitoring levels as "*de minimis* air quality levels." 40 C.F.R. § 52.21(i)(8)(i) at n.1.

[22]In addition, the requirement of performing a preconstruction air quality analysis would not apply if the facility were not a new major stationary source or "major modification" of an existing major source. 40 C.F.R. § 51.21(m)(1)(i). As discussed above in Part II.B, DOH properly determined that the net increase of NO_X emissions from the Project is below the PSD significance level for NO_X and, therefore, the Project is not a major modification with respect to NO_X. Accordingly, because DOH was correct in its NO_X netting analysis, DOH also was correct in determining that HELCO was not required to perform preconstruction ambient air monitoring of background concentrations of NO_X.

[23]The particulate matter emissions were determined to be 173 tpy of either total suspended particulates or PM_{10}, AAQ Report tbl.1, at 31, which is well above the significance level of 40 tpy for PM_{10}. 40 C.F.R. § 52.21(b)(23).

[24]In order to be eligible for the monitoring *de minimis* level exemption, the predicted impact must be less than monitoring *de minimis* levels specified in the regulations. 40 C.F.R. § 52.21(i)(8)(i).

below the monitoring *de minimis* level, AAQ Report tbl.4, at 34, DOH cannot rely on that lower predicted impact. That analysis was not based on the updated meteorological data provided by HELCO regarding 10-meter and 32-meter wind speeds and direction, which were used in the analysis described in Supplement A. Although DOH appears to rely exclusively on the analysis set forth in the main body of the AAQ Report to conclude that the predicted impact of PM_{10} would not exceed the monitoring *de minimis* level,[25] we conclude that DOH cannot ignore the exceedance of the PM_{10} monitoring *de minimis* level shown by the supplemental analysis. Accordingly, because the monitoring *de minimis* level exemption is not available when the predicted impact is greater than the regulatory defined levels, 40 C.F.R. § 52.21(i)(8), we conclude that HELCO was not entitled to a monitoring *de minimis* level exemption for particulate matter. We thus reject DOH's argument that HELCO was not required to perform an air quality analysis for particulate matter.

b. *Representativeness of the Ambient Air Data*

Next, we turn to the Petitioners' argument that the data used by DOH for the background ambient air concentrations of SO_2, O_3, CO and PM_{10} were not representative and that, therefore, DOH committed clear error by failing to require HELCO to perform on-site air quality monitoring of those pollutants.

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[25]In its response to the Petitions, DOH asserts that the applicable significance level was not exceeded for particulate matter without providing any citation to the record. DOH Response at 27. The text of the main body of the AAQ Report at page 25 draws a similar conclusion and refers to Table 4 as presenting a comparison of the predicted project maximum impacts to the regulatory levels. Table 4 of the AAQ Report shows that the predicted impact of PM_{10} would be 9 $\mu g/m^3$, 24-hour average, below the monitoring *de minimis* level. AAQ Report tbl.4, at 34. However, Supplement A sets forth a separate analysis of the predicted impacts. The text of Supplement A at page 39 draws no conclusion as to whether any exceedance is predicted. Instead, it merely refers to Table 1 as presenting a comparison of the predicted impacts and regulatory levels. Table 1 of Supplement A shows that the predicted impact of PM_{10} from the Project would be 11 $\mu g/m^3$, 24-hour average, which is above the monitoring *de minimis* level of 10 $\mu g/m^3$, 24-hour average. Supplement A tbl.1, at 43.

EPA guidance has recognized that so-called "representative" data gathered from off-site locations and/or gathered from time periods other than the year immediately preceding the permit application may be used in lieu of on-site air monitoring. *See* Draft Manual at C.18-C.19; *see also In re Kawaihae Cogeneration Project*, PSD Appeal Nos. 96-9 to 96-11, 96-14 & 96-16, slip op. 29 (EAB, Apr. 28, 1997), 7 E.A.D. __. The Draft Manual provides the following guidance regarding the criteria for determining whether data are "representative":

> In determining the "representativeness" of any existing data, the applicant and the permitting agency must consider the following critical items * * *:
>
> - monitor location;
> - quality of the data; and
> - currentness of the data.

Draft Manual at C.19. Generally, the choice of appropriate data sets for the air quality analysis is an issue largely left to the discretion of the permitting authority. *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 851 (Adm'r 1989) (denying review of permitting authority's decision to use "representative" off-site data, rather than requiring pre-application on-site monitoring). However, that discretion is not unlimited.

In the present case, DOH argues that it "considered the following three criteria for determining whether background data was representative: (a) monitoring station location, (b) data quality, and (c) data currentness." DOH Response at 28. DOH asserts that the first criterion was satisfied "because the monitoring stations were in the same region as the Station." *Id.* It also asserts that the second criterion was satisfied "because the monitoring stations collected data consistent with federal quality assurance and control guidance." *Id.* With respect to the third criterion, data currentness, DOH acknowledges that it had some concern, but it asserts that it still "felt" that the data were representative of the air quality in the region. *Id.*

None of the Petitioners have requested review of DOH's conclusion that the background air data satisfied the federal quality assurance and control standards. Instead, several Petitioners seek review of DOH's conclusion regarding the currentness of the background air data, and several Petitioners seek review of DOH's conclusion that the data were measured at locations appropriate to represent the ambient air quality within the areas to be affected by the Project. Specifically, KDC, Tanzella, and Rothstein argue that the SO_2 data are out of date because SO_2 was measured in 1984 and 1985, and that the PM data are out of date because PM was measured in 1985 and 1986. They argue that the SO_2 and PM data are out of date because of the length of time since collection of the data and because, subsequent to the data collection, the Kilauea volcano changed from a state of periodic eruption to one of continuous effusive activity. Tanzella Petition at 1; Rothstein Petition at 2; KDC Petition at 7-8.[26] In addition, Rothstein and Houser argue that the O_3 data are not representative because the data were measured approximately 70 kilometers east of the Station on the windward side of the Island, and Houser argues that monitoring of CO should be performed in the "Kona region." Rothstein Petition at 3; Houser Petition at 2, 3.

(i) *Currentness of SO_2 and Particulate Matter Data*

Turning first to the question of whether the 1984/1985 SO_2 data and the 1985/1986 PM data are out of date, we note that DOH has acknowledged in its response to the Petitions that it too had concern regarding the currentness of these data sets. DOH Response at 28. Specifically, DOH stated that it was concerned "because not all the data was collected within the three-year period prior to application submission, as recommended by EPA guidance * * *." *Id*. This concern arises from the Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD) (the "Ambient Monitoring Guidelines") prepared by

[26]Other Petitioners also argue that the volcanic activity serves as grounds for review of the Permit because of the volcano's impact on SO_2 and PM, although these Petitioners do not specifically argue that DOH's data are out of date. Houser Petition at 1-2; Aguilar Petition at 1; KCP Petition at 20-21.

the Office of Air Quality Planning and Standards, which states that "the data must have been collected in the 3-year period preceding the permit application, provided the data are still representative of current conditions." Ambient Monitoring Guidelines § 2.4.3.

In this case, DOH had previously responded to comments regarding the SO_2 data by stating that "[a]lthough the data was collected during 1984-85, sulfur dioxide point source emissions growth in the area since then have been primarily at the Keahole Generating Station. * * * Hence, the data is current with respect to point sources." 1995 Response to Comments at 19. DOH explained further that "the Department believes the 1984-85 sulfur dioxide data is valid to represent ambient levels because of the limited growth in point sources in the area. In general, stationary point sources are the principle sources of sulfur dioxide." *Id.* at 20.

The Petitioners argue that DOH's response to comments was not adequate because the response does not justify the length of time since the data were collected and because, according to Petitioners, stationary point sources are not the primary source of SO_2 in the ambient air in the Kona district of the Big Island. Instead, the Petitioners argue that the eruptions of the Kilauea volcano are the principal source of SO_2 and a significant source of particulate matter in the ambient air and that the volcano began a period of continuous effusive eruptions beginning after the date of the measurements. Mr. Rothstein argues that the "Kilauea Volcano is the largest stationary source of SO_2 emissions in the USA comprising 8.4% of the nation's top 100 such sources, discharging twice the amount of the next highest source." Rothstein Petition at 2. The Petitioners argue that the volcanic eruptions cause a combination of pollutants in the atmosphere known as "VOG."[27]

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[27]The Petitioners have not precisely defined what they mean by "VOG." However, it is clear that at a minimum the Petitioners refer to the large quantities of SO_2 emissions as discussed above. Mr. Houser also describes the atmospheric conditions as including "SO_2, sulfate aerosols, fine glass particles as well as sulfuric and hydrochloric acid." Houser Petition at 1-2.

In its response to comments DOH stated as follows with respect to the issue of volcanic eruptions:

> The volcano erupted in 1983. Volcanic gases released into the atmosphere and transported to the Kailue-Kona area would have been recorded by the monitoring equipment if the gases could be detected.

1995 Response to Comments at 20. However, the Petitioners recognize that the volcano erupted periodically during the time when the data were collected, but they argue that a period of continuous effusive eruption began in late 1985 or early 1986, after the SO_2 and PM data were collected. Mr. Rothstein states as follows:

> Ambient air samplings used by HELCO were obtained for a year beginning Feb. 1984. During this time volcanic eruptions were sporadic and generating inconsequential amounts of VOG based SO_X and particulates. From late 1985 to the present, the volcano has been erupting almost continuously resulting in heavy concentrations of SO_X and particulates.
>
> The SO_X and particulates from the continuous post 1985 eruption has NOT been recorded by HELCO in its background concentrations data despite many requests from the public to DOH to do so. * * * It is thus impossible for the DOH to determine HELCO's compliance with the National Ambient Air Quality Standards (NAAQS).

Rothstein Petition at 2; *see also* Tanzella Petition at 1 ("In 1986, Kilauea Volcano changed from a state of periodic fountaining of lava and gas to one of *continuous effusive activity* that persists through today.").

Although DOH's response to comments noted that the volcano erupted in 1983, that statement does not adequately address the

Petitioners' argument that there was a significant change in the pattern of eruption in 1985 or 1986 from one of periodic eruptions to an almost continuous effusive eruption.[28] DOH's response did not explain why the data measured from prior to the change in volcanic activity would be representative of the ambient air quality after the change. Alternatively, if DOH disputes the Petitioners' allegation that a change in eruption pattern occurred, it should have clearly stated its conclusion on this issue and provided support in the record. Because DOH did not respond to the Petitioners' contentions regarding a change in volcanic activity and the alleged effect of that change on the background ambient air quality, we find that DOH's responses to comments on the issue of currentness of the SO_2 and particulate matter data were not adequate.

Moreover, none of DOH's responses to comments adequately address the question of whether it is appropriate for DOH to rely upon data collected from approximately seven years prior to HELCO's submission of its application, when EPA guidance states generally that "the data must have been collected in the 3-year period preceding the permit application, provided that the data are still representative of current

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[28]We note that according to publicly available information from the U.S. Geological Survey, the Kilaueau volcano erupted on January 3, 1983 followed by three years of episodic eruptions usually for less than 24 hours at a time and separated by repose periods of on average 25 days. However, the eruption pattern changed in July 1986 to a nearly continuous effusion. *See* M.T. Mangan *et al.*, *Episode 49 of the Pu'u 'O'o-Kupaianaha Eruption of Kilauea Volcano*, 57 Bull. Volcanology 127 (1995) ("These spectacular events [the "fire fountaining" episodic eruptions] gave way in July 1986 to five and a half years of near-continuous, low-level effusion * * *."); *see also* U.S. Geological Survey/Hawaiian Volcano Observatory, *Summary of the Pu'u 'O'-Kupaianaha Eruption, 1983-Present* (last modified Mar. 20, 1998) <http://hvo.wr.usgs.gov/kilauea/summary/>. This provides some support for the Petitioners' argument. However, as this information is not in the record of this proceeding, we do not directly rely on it. Instead, we find that the Petitioners have argued that there was a material change in volcanic activity bearing on whether the SO_2 and particulate matter data are representative of current conditions and DOH has not adequately responded to the Petitioners' contention.

conditions." Ambient Monitoring Guidelines § 2.4.3.[29] Therefore, Petitioners are correct that DOH's responses to their comments were not adequate.

DOH now in its response to the Petitions offers a new argument in an effort to show, or at least confirm, that the SO_2 and PM data were representative. DOH now states that subsequent to its determination to issue the Permit, DOH received more recent data regarding background concentrations of particulate matter and SO_2 in the ambient air. DOH Response at 28-29. DOH states that PM was measured at the Keahole Airport monitoring station, located 1.7 kilometers east of the Project during a twelve-month period ending in July 1997, and PM was measured at the Konawaena monitoring station, located 27 kilometers southeast of the Project, during a twelve-month period ending in December 1997. *Id.* In addition, DOH states that SO_2 was also measured at the Konawaena monitoring station for an eight-month period from March 1997 to December 1997. *Id.* DOH asserts that, had it used these new data in its analysis, the results of the air quality analysis "would not have changed." *Id.* at 29. In its appellate brief, DOH concludes that "[e]ven if the updated monitoring data for particulates and SO_2 were used in the analysis, the proposed Station expansion would still be in compliance with the NAAQS * * *." *Id.* at 29-30.

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[29]DOH's response to comments merely addressed issues of point source growth and explained that such growth was considered in the modeling analysis. *See* 1995 Response to Comments at 19-20. This response is not adequate because it does not explain why it was appropriate for DOH to use data that were approximately seven years old at the time of submission of the application, although it does explain why DOH considered the totality of the analysis (background air data and modeling) to be sufficient. Moreover, DOH's response is not sufficient even with respect to the totality of the analysis because the determination of compliance with the NAAQS is not limited to modeling of nearby point source growth, but must also include consideration of area and mobile sources, natural sources, and distant point sources. Draft Manual at C.34. As noted, DOH has not adequately shown how its analysis took into account the alleged change in volcanic activity (a natural source of SO_2 and particulate matter) when the background ambient air data sets were not current.

DOH thus requests that we consider the newer PM and SO_2 data from 1996/1997 and that we conclude from DOH's summary of these data that there was no error in DOH's use of the older data in its analysis. We reject this argument, because DOH's prior responses to comments were not adequate as discussed above and because the new data that DOH now offers were not in the record and available during the public comment period. In enacting the CAA, Congress required the Administrator of the EPA to promulgate regulations governing the required ambient air quality monitoring and analysis. CAA § 165(e)(3), 42 U.S.C. § 7475(e)(3). Congress determined that the air quality analysis required by the regulations "shall be available at the time of the public hearing on the application for such permit." CAA § 165(e)(3)(C), 42 U.S.C. § 7475(e)(3)(C). Further, the regulations governing PSD permitting decisions require that material relied upon in making a permit decision be included in the record. 40 C.F.R. §§ 124.09, 124.18. In this case, the 1996/1997 SO_2 and PM data were not made available at the time of the public comment period and were not included in the public record. Indeed, there is no suggestion that the Petitioners have had an opportunity to examine or review these new data. Accordingly, the 1996/1997 SO_2 and PM data have not been subject to public scrutiny and comment as contemplated by the statute and regulations. Although DOH has offered these new data in order to confirm its earlier analysis and not necessarily as a substitute analysis, we believe that it would be especially inappropriate for us to rely upon the new data under these circumstances where we have already determined that DOH's responses to comments were not adequate.[30] We therefore grant review of the Permit and remand to DOH to prepare an updated air quality impact report that includes current SO_2 and PM data, followed by notice and opportunity for comment.

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[30]Moreover, while we do not pass judgment on any issues regarding the adequacy of the new data or whether they show that the Project will comply with the applicable air quality standards and regulations, we note that DOH's description of the new data shows a sixfold increase from the mid-1980s in the annual average concentration of SO_2, a more than 100% increase in the 24-hour average concentration, and an almost 100% increase in the 3-hour average concentration of SO_2 in the background ambient air.

(ii) *Location Representativeness of the CO and O_3 Data*

Next, we turn to the question of whether the CO and O_3 data were measured at an off-site location that is representative of the air quality in the areas that would be affected by emissions from the Project. The CO and O_3 data were measured at Waiakea near Hilo on the eastern side of the Big Island. DOH Response at 27-28. The Petitioners argue that Waiakea is not a representative location because it is located 70 kilometers east of the Station on the windward side of the Island. Houser Petition at 2; Rothstein Petition at 3.

With respect to the representativeness of the monitor location, the Ambient Monitoring Guidelines state that "[e]ach determination must be made on a case-by-case basis." Ambient Monitoring Guidelines § 2.4.1. To assist in the case-by-case analysis, it also provides three examples to "clarify EPA's intention regarding the use of existing monitoring data." *Id.* Although the Administrator observed that "[t]he [Ambient Monitoring G]uidelines are very broad and leave much to the discretion of the permitting authority," *In re Hibbing Taconite Co.*, 2 E.A.D. 838, 851 (Adm'r 1989), nevertheless, it is possible to discern from the examples limits to the permitting authority's discretion.

The three examples illustrate when data may be drawn from (1) a regional site, (2) a site near the affected areas, and (3) when the data "could only be" drawn from sites within the affected area. In describing this last example, the guidance states that use of on-site monitoring is necessary "[i]f the proposed construction will be in an area of multi source emissions and in areas of complex terrain, aerodynamic downwash complications, or land/water interface situations * * *." Ambient Monitoring Guidelines § 2.4.1. In contrast, in describing when data may be taken from a regional site, the guidance states that "[t]he intent of EPA is to limit the use of these 'regional' sites to relatively remote areas, and not to use them in areas of multi source emissions or areas of complex terrain." *Id.*

In the present case, DOH justified the use of the Waiakea data by asserting in its response to comments that "[t]he Waiakea monitoring station is considered a regional site for carbon monoxide and ozone ," 1995 Response to Comments at 20, and that "[d]ata was used from this regional site station because there are no nearby ozone monitoring stations." *Id.* at 29. The Petitioners argue that DOH's response was not adequate because Waiakea is located near Hilo approximately 70 kilometers east of the Station on the windward side of the Island. Houser Petition at 2; Rothstein Petition at 3. The Petitioners also argue throughout their Petitions that the air quality in the vicinity of the Station is significantly affected by its location in the lee of the mountains where air pollutants may be trapped. Mr. Houser states this issue as follows:

> Kona is the only locale in the Hawaiian islands whose weather is not controlled by the prevailing trade winds. Rather than having the benefit of cleansing trade winds, the trade winds blow volcanic emissions around South Point. Then the VOG is sucked into Kona in the late morning as the large land mass heats creating an on-shore breeze trapping the VOG below the inversion layer.

Houser Petition at 2. In its appellate brief, DOH responds by simply reiterating the same argument it made in the response to comments. DOH states that the representativeness criterion "was met because the monitoring stations were in the same region as the Station." DOH Response at 28.

We recognize that a determination of location representativeness of data is site-specific and that much is left to the discretion of the permit issuing authority. *Hibbing Taconite*, 2 E.A.D. at 850-852. Nevertheless, here DOH's response to comments and its argument in response to the Petitions are not adequate. DOH has simply asserted that use of a regional site is appropriate without explaining why. As noted, the EPA's guidelines state that regional sites are not to be used "in areas of multi source emissions or areas of complex terrain." Ambient Monitoring Guidelines § 2.4.1. Conversely, on-site monitoring is necessary "in an

area of multi source emissions and in areas of complex terrain, aerodynamic downwash complications, or land/water interface situations * * *." *Id.* Here, DOH's response is not adequate because it does not explain why the Waiakea/Hilo regional site data are representative, where the Petitioners have argued that the wind patterns associated with the windward and lee sides of the mountains distinguish Waiakea from the Station and where there may be other land/water interface, terrain or aerodynamic issues.[31]

It is self-evident that use of off-site data must be based on a determination that the data are reasonably representative of the air quality in the location to be affected by the source. DOH has not provided any adequate showing here that the CO and O_3 data are representative, and therefore we remand to DOH so that it may reopen the permit proceedings to supplement its response to comments with a detailed explanation of why the CO and O_3 data are reasonably representative or perform a new air quality analysis based on either on-site data or other data shown to be representative of the air quality in the area to be affected by the Project.

3. *Unrepresentative Meteorological Data*

Several Petitioners also argue that DOH committed clear error by using unrepresentative meteorological data that do not take into account the conditions at the Station. Rothstein Petition at 3 (arguing that DOH erred by using mixing height data from Hilo); Mosher Petition at 1 (same); Houser Petition at 2 (same and arguing that DOH failed to include analysis of differing micro climates).

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[31]As noted, DOH merely stated in its response to comments that "[t]he Waiakea monitoring station is considered a regional site for carbon monoxide and ozone." 1995 Response to Comments at 20. DOH also stated in its response to comments that "[d]ata was used from this regional site station because there are no nearby ozone monitoring stations. It is important to note that ozone is formed in the ambient air many miles downwind from the source of ozone precursors." *Id.* at 29. These responses do not adequately address the contention that the Waiakea site is affected by allegedly "cleansing" trade winds, while the Station is affected by a daily "on-shore breeze."

DOH used mixing height data from the National Weather Service Station in Hilo. The Petitioners argue that the mixing height data used by DOH are not representative because Hilo is 70 kilometers east of the Station and located on the windward side of the Big Island. In its response to comments, DOH stated that an additional analysis was performed using adjusted mixing height data from the National Weather Service Station in Lihue (on the Island of Kauai). 1995 Response to Comments at 14. DOH stated further that "[w]ithin the State, there are only two National Weather Service stations that collect upper air data," and that "unless specific guidance is promulgated by the USEPA, the Department will not likely require the collection of mixing height as a preconstruction monitoring requirement." *Id.* The Petitioners argue that this response to comments is not adequate.

Although the Ambient Monitoring Guidelines state that it is "essential" that meteorological data be representative of atmospheric dispersion conditions at the source and that site-specific data "are always preferable to data collected off-site," it also states that hourly mixing height data "may be limited to an extrapolation of twice-daily radiosonde measurements routinely collected by the National Weather Service." Ambient Monitoring Guidelines ¶ 5.1. A review of the record also reveals that DOH carefully analyzed the question of proper location for mixing height data as is evidenced by its request in August 1995 for "additional clarification or information" regarding the mixing height data. Record A.99 (Letter from DOH to HELCO dated Aug. 25, 1995); *see also* Record A.100 (Letter from HELCO to DOH dated Aug. 31, 1995, providing additional information). A review of the applicable EPA guidance and the record in this case show that the issue of proper location for mixing height data is highly technical in nature. "'[A]bsent compelling circumstances, the Board will defer to a [permit issuer's] determination of issues that depend heavily upon the [issuer's] technical expertise and experience.'" *In re Ash Grove Cement Co.*, RCRA Appeal Nos. 96-4 & 96-5, slip op. at 23 (EAB, Nov. 14, 1997), 7 E.A.D. __ (quoting *In re Envotech, L.P.*, 6 E.A.D. 260 (EAB 1996)). In this case, the Petitioner's arguments regarding distance of Hilo from the Station and the effects of the trade winds are not sufficient to show clear error in DOH's use of the

Hilo and Lihue mixing height data and, therefore, we defer to DOH's determination.

4. *Emissions Increases from Other Sources*

Several Petitioners argue that DOH's analysis failed to accurately include emissions increases from other sources. *See, e.g.*, KCP Petition at 15 (arguing that the emissions for CT-2 were underestimated); KDC Petition at 8 (arguing that air traffic emissions have increased); Houser Petition at 2 (same and arguing that highway traffic has increased); Rothstein Petition at 3 (same). We reject the Petitioners' arguments because the Petitioners have not shown how DOH's responses to comments were not adequate.

DOH's response to comments stated that the airport traffic was "considered the most recent data available" when the application was initially submitted. 1995 Response to Comments at 25. DOH also stated that "[r]egulatory permitting guidance does not require the evaluation of carbon dioxide mobile and area sources to determine increment compliance." *Id.* at 26. DOH also explains in its appellate brief that the Project netted out of the requirement for a NO_X analysis. Because the Petitioners have not shown that these responses are clearly erroneous, we deny review of DOH's mobile source analysis.

With respect to the increased emissions from Unit CT-2, DOH stated in its response to comments that "[a]ll emission calculations, including the ambient air quality analysis, in the CT-2 and CT-4 & 5 applications, used the original maximum allowable emission rate of 48.2 pounds per hour for CT-2. The proposed emissions rate increase, from 34.8 pounds per hour to 46.0 pounds per hour, has been accounted for in the CT-4 and 5 application." 1997 Response to Comments at 22. KCP has not shown that this response is clearly erroneous and, accordingly, we also deny review of this issue.

5. *Improper Modeling Program*

One Petitioner argues that DOH erred by using a modeling program that was not adequate to represent pollutant impact on the local air quality. Rothstein Petition at 2. This Petitioner argues that a more sophisticated program is required to model the onshore and offshore breezes that occur at the site. We reject this argument because the Petitioner has not shown that DOH's response to comments was clearly erroneous. DOH stated in its response to comments that it did model onshore and offshore breezes, *see* 1995 Response to Comments at 15, and that the modeling program it used has been approved by the EPA. AAQ Report at 24. Because the Petitioner has not shown that these comments are clearly erroneous, we deny review of DOH's determination regarding the appropriate modeling program.

E. *Consultation With Land Use Authorities*

Ms. Ratliff requests that we review the Permit on the grounds that DOH allegedly breached the delegation agreement with the Region by failing to consult with the appropriate land use agency. Ratliff Petition at 1. Ms. Ratliff argues that Part III.C.2 of the Amended Delegation Agreement states that DOH must consult with federal, state and local land use agencies prior to issuance of preliminary determinations on PSD permits. *Id*. at 1-2. Ms. Ratliff further argues that the appropriate state agency is the Board of Land and Natural Resources ("BLNR"), which Ms. Ratliff alleges was not consulted by DOH prior to its decision to issue the Permit. *Id*. at 2-3. Finally, Ms. Ratliff argues that the failure to consult with the BLNR resulted in a failure to consider important federal and state land use policies relating to the use of water allegedly belonging to the State of Hawaii and relating to limited authorized use of so-called "ceded lands." *Id*. at 3-4. Ms. Ratliff argues that the failure to consult constitutes an abuse of discretion.

DOH argues that Ms. Ratliff's Petition should be denied because she allegedly did not raise the land use issue during the public comment period and because the Petition fails to identify a permit condition to be

reviewed. DOH also argues that the land use issues are outside of the scope of DOH's air permitting requirements and authority and that it has complied with all applicable rules and policies. With respect to the first argument, it is evident that land use issues were raised during the public comment period, as DOH stated in its response to comments that land use issues are "outside of the scope and intent of the public comment period and of DOH's air permitting requirements and authority." 1997 Response to Comments at 1-2. We reject Ms. Ratliff's Petition, however, because she has not shown that this response to comments is clearly erroneous.

The portion of the Delegation Agreement to which Ms. Ratliff refers as the basis for her argument appears to focus on the EPA's nondelegatable responsibilities with respect to the Endangered Species Act, not issues regarding ceded lands or the Department of Hawaiian Home Lands water rights. It states in full as follows:

> The Hawaii DOH must consult with the appropriate Federal, State, and local land use agencies prior to issuance of preliminary determinations on PSD permits.
>
> In particular, USEPA requires that the Hawaii DOH must:
>
> (a) Notify the Fish and Wildlife Service (FWS) and USEPA when a PSD permit application has been received, in order to assist USEPA in carrying out its non-delegable responsibilities under Section 7 of the Endangered Species Act (PL 97-304). Hawaii DOH must:
>
> (b) Notify potential applicants of the potential need for consultation between USEPA and the FWS if an endangered species may be affected by the project.
>
> USEPA's data sheet may be used for this process (copy enclosed).

> (c) Refrain from issuing a final PSD permit unless the FWS has determined that the proposed project will not adversely affect any endangered species.

Prevention of Significant Deterioration Delegation of Authority State of Hawaii, 54 Fed. Reg. 23,978, 23,979 (June 5, 1989).

In the present case, Ms. Ratliff has not alleged any failure with respect to consultation with federal or state agencies regarding endangered species. Given that the text of the Delegation Agreement appears to be directed to consultation regarding the Endangered Species Act, we find no clear error in DOH's response to comments that land use issues related to "ceded lands" and water rights are outside of the scope and intent of DOH's air permitting requirements and authority. This is consistent with our prior case law where we have held that the permit issuer may determine that certain issues not mandated by the CAA are more properly addressed by agencies within the local government. *See In re EcoEléctrica, L.P.*, PSD Appeal Nos. 96-8 & 96-13, slip op. at 24-25 (EAB, Apr. 8, 1997), 7 E.A.D. __ (questions regarding need for proposed power plant deferred to Puerto Rican government); *In re Commonwealth Chesapeake Corp.*, 6 E.A.D. 764, 781 (EAB 1997) (holding that permit issuer did not clearly err by electing not to address in the PSD proceeding issues regarding consumption of groundwater where the PSD permit conditions were not directly implicated, the issues did not affect the BACT determination, and the groundwater issues could be addressed in a separate proceeding).[32] Accordingly, we deny Ms. Ratliff's Petition.

[32]Petitioners Mosher and Aguilar also allege that there is no power shortage requiring the building of this plant. For the reasons stated in *EcoEléctrica*, slip op. at 23-25, this issue is properly left to the local authorities and we therefore find no clear error in DOH's response to comments on this issue.

III. *CONCLUSION*

For the reasons set forth above, we deny review of DOH's determination to issue the Permit to HELCO with respect to issues regarding NO_X netting and BACT for SO_2. The Permit is remanded with respect to the issues regarding the currentness of the SO_2 and PM data and the location representativeness of the CO and O_3 data. DOH is directed to reopen the permit proceedings for the limited purpose of (1) providing an updated air quality impact report incorporating current SO_2 and PM data; and (2) providing a sufficient explanation of why the CO and O_3 data are reasonably representative or to perform a new air quality analysis based on either on-site data or other data shown to be representative of the air quality in the area to be affected by the Project. DOH must accept and respond to public comments on its decision with respect to these issues, and any party who participates in the remand process on these issues and is not satisfied with DOH's decision on remand may file an appeal with the Board pursuant to 40 C.F.R. § 124.19. [33] Any appeal must be limited to the issues addressed on remand.

So ordered.

[33] Although 40 C.F.R. § 124.19(c) contemplates that additional briefing typically will be submitted upon a grant of a petition for review, a direct remand without additional submissions is appropriate where, as here, it does not appear as though further briefs on appeal would shed light on the issues to be addressed on remand. *In re Masonite Corp.*, 5 E.A.D. 551, 586 (EAB 1994).